

REMARKS

The Office Action dated August 10, 2007, has been received and carefully noted. The above amendments to the claims and the following remarks, are submitted as a full and complete response thereto.

Claims 1-42 are pending. Claims 1, 21, 22, 31, and 42 are herein amended without adding new matter. Applicants respectfully request reconsideration in view of the following and submit claims 1-42 for reconsideration.

Applicants appreciatively acknowledge Examiner's participation in a telephone interview held on October 24, 2007. As discussed in the interview, the foregoing amendments and the following remarks address the rejections cited in the Office Action.

Rejection under 35 U.S.C. §103(a) based on Kristol and Malkin

Claims 1-14 and 21-42 were rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over Kristol et al. (US 5,541,927) in view of Malkin et al. (US 6,311,206). As discussed in the examiner interview, Applicants respectfully traverse this rejection for at least the following reasons.

As amended, claim 1, upon which claim 2-20 depend, is generally directed toward a network hub in a communication network that includes a server. The server detects status information from the communication network and pushes the status information to a client without a request for the status information from the client. The status information includes information about the communication network.

As amended, claim 21, upon which claims 22-30 depend, is generally directed toward a communication apparatus that includes a network information detector that detects network information from a communication network and a network information table that stores network information detected by the network information detector. The communication apparatus also includes a network information transmitter that selectively pushes the network information in the network information table without a request for the network information. The network information includes information about the communication network to which the communication apparatus corresponds.

As amended, claim 31, upon which claims 32-41 depend, is generally directed toward a communication apparatus that includes a network information receiver that is operably connected to a communication network. The communication apparatus also includes a network information table that stores network information from the network information receiver. The communication apparatus also includes a network operations detector that detects networking information from the communication network and produces operational information of an operational state of the network. The communication apparatus also includes a network information transmitter that transmits the operational information of an operational state of the network without a request for the operational information. The network information includes information about the communication network.

As amended, claim 42 is generally directed toward a status apparatus for use in a communication network. The status apparatus includes a network hub in a

communication network and a server in communication with the network hub. The server detects status information from the communication network and pushes the status information to a client without a request for the status information from the client. The status information includes network information about the communication network.

It is respectfully submitted that the combination of Kristol and Malkin fails to disclose or suggest all the elements of claims 1, 21, 31, and 42.

Kristol is generally directed to a method for multicasting using transport layer protocols that are suitable for ATM networks. In Kristol, a source multicasts data packets to all destinations. In turn, each destination that is first in a column sends its status to the source, and the remaining destinations in the column send their status to the first destination in the column. The first destination in the column then locally re-multicasts if any destinations below the first destination in the column did not receive the multicast packet. The source re-multicasts if a first destination in a column has not received the packet. In this manner, Kristol discloses a method of network multicasting.

However, Kristol does not disclose or suggest a “*server configured to detect status information from the communication network and push the status information to a client*...wherein the status information...comprises information about the communication network” as recited in claim 1. [emphasis added]. Instead, in Kristol, the source multicasts packets to all destinations, receives a notification if certain destination did not receive all the packets, and then re-multicasts the packets. Though Kristol discloses the destinations as sending packets to the source regarding which blocks have

been received, this data flow is in the exactly opposite direction from that disclosed in claim 1, where “the server [is] configured to...push status information to a client...”

When the Kristol source receives a notification that only some of the packets were received, the source does not send that notification back to the destination; instead, the source re-multicasts the original packets. Adapting Kristol to push the block information *back* to the destinations would be the exact opposite of what Kristol discloses. Accordingly, Kristol does not disclose a “***server configured to detect status information from the communication network and push the status information to a client...wherein the status information...comprises information about the communication network***” as recited in claim 1. [emphasis added].

Furthermore, Applicants respectfully assert that Kristol fails to disclose “the server configured to detect status information from the communication network and push the status information to a client...***wherein the status information...comprises information about the communication network.***” [emphasis added]. Though the Kristol source may be able to acknowledge a transmission from a destination regarding missing blocks, this is not to say that the Kristol source is capable of detecting status information about the communication network. Information about a network includes information distinct from whether or not a particular packet was received by a destination. It follows that enabling the detection of status information about the communication network would involve logical instructions and/or circuitry beyond that required to merely acknowledge a packet-missing notification. Accordingly, Applicants respectfully assert that Kristol fails

to disclose or suggest, “the server configured to detect status information from the communication network and push the status information to a client...*wherein the status information...comprises information about the communication network.*” [emphasis added].

Additionally, Malkin fails to remedy the deficiencies of Kristol. More specifically, Malkin fails to disclose or suggest, at least, “the server configured to detect status information from the communication network and push the status information to a client...wherein the status information...comprises information about the communication network.”

Malkin is generally directed toward a method for providing awareness-triggered pushes. In Malkin, a source server requests an awareness server to notify it when a specific client entity is in a particular state. When the awareness server learns that the client has entered such a state, the awareness server notifies the source server (or sometimes a push proxy server) accordingly. Sometimes, the awareness server will communicate certain information to the source server during the notification. This may include connectivity status information, PING information, information regarding an automated notification from the client, and so on. In response to the notification, the source server (or push proxy server) sends “data” to the client.

However, Malkin fails to disclose or suggest “*the server configured to detect status information from the communication network* and push the status information to a client...wherein the status information...comprises information about the

communication network.” [emphasis added]. Rather, Malkin discloses that the source server receives a message about a target client in a response to a request for information about the target client. Receiving a purposefully transmitted message is not comparable to having to “detect status information.” The logical instructions and circuitry required to “detect” a particular type of information in a flow of data is clearly distinct from that required to merely receive a purposefully transmitted message in response to a purposefully transmitted request. Therefore, Applicants respectfully assert that Malkin fails to disclose or suggest “*the server configured to detect status information from the communication network* and push the status information to a client...wherein the status information...comprises information about the communication network.” [emphasis added].

Additionally, Malkin fails to disclose or suggest a “*the server configured to detect status information from the communication network and push the status information to a client*...wherein the status information...comprises information about the communication network.” [emphasis added]. Instead, Malkin discloses that the awareness server, when notifying the source server of the particular status of a particular client, may communicate certain “critical data” such as connectivity status information, PING information, a information regarding an automated notification from the client, and so on. However, there is no disclosure or suggestion in Malkin that this information is then pushed to the client. Instead, Malkin distinctly and generically discloses that the sources server only communicates “data” to the client. Malkin is silent regarding

communicating status information to the client. The fact that Malkin is silent in this regard should be of no surprise because the information sent to the source server as part of the notification is likely already owned by, or readily accessible to, the client. Accordingly, Applicants respectfully assert that Malkin fails to disclose or suggest, at least, “*the server configured to detect status information from the communication network and push the status information to a client...wherein the status information...comprises information about the communication network.*” [emphasis added].

Furthermore, Applicants respectfully assert that any attempt to combine the Malkin source server, network, and awareness server would be an improper analysis based on hindsight. Malkin is explicitly directed toward a highly distributed network as disclose in Figures 1, 2, and 5, and again in Figure 7. Indeed, Malkin not only fails to disclose or suggest the server of claim 1, but teaches away from such a server by repeatedly and explicitly disclosing such a highly distributed network. Applicants respectfully assert that cramming the distributed functionality attributed to multiple servers and a network into a single hub or switch is not a fair interpretation of Malkin.

For all of the foregoing reasons, Applicants respectfully assert that Kristol and Malkin fail to disclose or suggest, at least, “the server configured to detect status information from the communication network and push the status information to a client without a request for the status information from the client...wherein the status

information...comprises information about the communication network” as recited in claim 1.

Accordingly, Applicants respectfully request that the §103(a) rejection of claim 1 be withdrawn. Similarly, Applicants request that the §103(a) rejection of independent claims 21, 31, and 42 be withdrawn on similar grounds since they contain similar limitations, though each claim has its own scope. Also, Applicants request that the §103(a) rejection of dependent claim 2-14, 22-30, and 32-41 be withdrawn for at least their dependence on claims 1, 21, and 31.

Rejection under 35 U.S.C. §103(a) based on Kristol, Malkin, and Fujino

Claims 15-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kristol in view of Malkin, and further in view of Fujin et al. (US 5,651,006). However, Applicants traverse this rejection for at least the following reasons.

As presented above, Kristol and Malkin fail to disclose or suggest, at least, “the server configured to detect status information and push status information to a client without a request for the status information from the client...wherein the status information...comprises information about the communication network” as recited in claim 1, upon which claims 15-20 depend. Fujin does not remedy the deficiencies of Kristol and Malkin.

Fujin generally discloses a hierarchical communication network management system that includes a plurality of agents and sub-managers connected to lower

communication networks and an integration manager connected to a higher communication network. The Fujin sub-managers function as agents to the integration manager and as managers to the agents. This enables the use of Simple Network management Protocol (SNMP) between each agent and its sub-manager and between a sub-manager and the integration manager. This also enables the transmission of management information between an integration manager and sub-managers based on a small volume of management packets.

However, Fujin fails to disclose “*the server configured to detect status information from the communication network*” and push the status information to a client without a request for the status information from the client...wherein the status information...comprises information about the communication network” as recited in claim 1. [emphasis added]. Instead, Fujin discloses that the sub-managers function as agents to the integration manager and as managers to the agents to enable the use of SNMP. Though this intermediary functionality of the sub-managers is useful within the scope of Fujin itself, it is certainly not comparable to the claim 1 server that detects and pushes network status information.

Additionally, Fujin does not disclose “*the server configured to detect status information and push status information to a client without a request for the status information from the client*...wherein the status information...comprises information about the communication network” as recited in claim 1. [emphasis added]. In Fujin, a sub-manager operates as an intermediary between an integration manager and agents, as

described above. However, Fujin is void of any reference of a sub-manager pushing data to a client, let alone any references of detecting network data *and* pushing the network data to the client without a request there from.

Furthermore, Fujin fails to disclose “the server configured to detect status information and push status information to a client without a request for the status information from the client...*wherein the status information...comprises information about the communication network*” as recited in claim 1. [emphasis added]. Though Fujin discloses the transmission of management information, there is no disclosure or suggestion that this management data is comparable to the “status information” of claim 1. Fujin discloses management information as information held in a format called MIB (Management Information Base) which is a set of management objects expressed in a tree structure. Clearly, this management information is not comparable to the status information of claim 1.


For all of the foregoing reasons, Applicants respectfully assert that Kristol, Malkin, and Fujin fail to disclose or suggest each limitation of claim 1. Accordingly, Applicants respectfully request that the §103(a) rejection of claims 15-20 be hereby withdrawn for at least their dependency from claim 1.

Conclusion

In light of the foregoing, Applicants respectfully request that the rejection presented in the Office Action be withdrawn. It is also respectfully requested that the application pass to issue with the allowance of claims 1-42. If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicants' undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



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Enclosures: Replacement Drawings (Formals – 7 Sheets)

AMENDMENTS TO THE DRAWINGS:

The attached Replacement Drawing sheets including formal drawings for Figs. 1-7, and submitted herewith to replace the original drawing sheets filed on May 26, 2000. No new matter has been added.